

Appl. No. 09/814,331
Reply to Office Action of FEB 05, 2003

REMARKS/ARGUMENTS:

This Amendment is in response to the Office Action mailed **MAR 21, 2001**.

We thank the examiner for his comments and suggestions and have amended the claims in view of his comments. We respectfully request that the claims be reconsidered based on the following reasons given. The paragraphs in which the examiner's objections occur are listed, followed by our reply.

Claim Rejections under 35 USC § 112**Paragraph 4**

Objection to Claim 1 has been obviated by the deletion of reference to the removal of surface porosity. This step has been replaced by the technique of infiltrating the pores of a plastic object with a curable polymer as supported in the specification.

Paragraph 6

Objections covered in paragraph 6 of the examiner's written opinion are obviated by the following amendments:

- Claim 1: reference to the removal of surface porosity has been deleted;
- Claims 1, 2, 4, 5, 9-12: proper antecedent basis has been provided for the various surfaces obtained by each successive step of the process in the listed claims by clear description of the appearance or state of each surface so as to unambiguously distinguish the different layers and surfaces;
- Claim 3: claim has been amended to direct the applying of lacquer on the matt surface obtained from the step of Claim 2.
- Claim 4-5 and 11-12: error in the labeling of the step (f) has been rectified;
- Claim 8: Claim 8 has been deleted;
- Claim 9: the degree of smoothness in Claim 9 and other claims is addressed by specifying the degree of roughness (Ra) obtained in each significant step in Claims 1 and 2.
- Claim 11: the lacquer layer has been distinguished from the hardener layer.

Claim Rejections under 35 USC § 102**Paragraph 8**

We respectfully submit that US 5,470,609 Leach does not anticipate the present invention. The process taught by Leach is to repair defects – large scratches, gouges and sand-throughs in large plastic articles such as automotive body panels. (Column 1, Lines 18-19).

The porosity mentioned in the description cannot be intended to be in the same order of magnitude as that of the pores of the present invention. The defects described by Leach are caused by dirt or debris entering the mold (Column 1, Lines 24-28).

The porosity described in the present invention, is caused as a consequence of the method of fabricating plastic rapid prototypes by selective laser sintering. In addition, the porosity described by Leach cannot be routinely present in articles formed by bulk molding compound or sheet molding compound (Column 1, Lines 10-11) or the technique of Leach will have to be used as a routine step as part of the manufacturing process for such articles.

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In addition, this repair technique of Leach teaches the application of a dry thermosetting powder, curing of the applied powder coating, and removal of the excess cured powder (eg by sanding) so as to allow the repaired area in question to conform to the shape of the mold cavity used to form it. The technique of the present invention is not to correct defects but to enable rapid prototypes to closely resemble finished products for marketing purposes (Page 3, Line 5-7).

We have amended Claims 1 and 2 to provide for infiltration of the plastic object by a curable polymer. The sanding of the surface in Claim 2 is done after the polymer has been cured. In Leach, the sanding described in Column 4, Lines 7-18 is used differently. In Leach, sanding is used to smooth out any rough or jagged features prior to the application of the powder coating material.

Claim Rejections under 35 USC § 103

Paragraph 11

Claims 3, 5 and 8 are dependent claims on Claim 1. Our reply stating our contention that Leach does not anticipate the present invention is given above. Hence, the combination of processes taught by the present invention has not been anticipated by Leach.

Paragraph 12

The reference to painting has been changed by the current amendments to Claim 5 wherein graphics are applied by printing. Again, the combination of processes taught by the present invention has not been anticipated by Leach.

Paragraph 13

Further to our reply to examiner's point contained in Paragraph 8 under **Claim Rejections under 35 USC § 102** above, the claims of Leach are directed to repairing a surface defect in plastic object formed by molding (Claims 1 and 14) or formed from a fiber reinforced thermosetting resin (Claim 9) and should be interpreted as so.

Under the present invention, the process taught is applicable to plastic rapid prototypes wherein surface porosity and miniature steps are not defects but consequences of the method of fabricating the prototype by, for example, selective laser sintering. Again, we respectfully submit that Leach does not anticipate the present invention.

Paragraph 14

Claims 7 and 8 are withdrawn.

Paragraph 15

We thank the examiner for pointing out that the prior art does not teach or reasonably suggest the subject matter of Claims 9-13. We have amended Claims 9-13 to remove the objections under 35 USC § 112.

Reconsideration and allowance of independent Claim 1 is respectfully requested. In view of the foregoing Amendment and remarks, it is respectfully urged that all pending claims are in condition for allowance, and such action as well as passage of this case to issue is respectfully requested.

Attached hereto is a Petition and Fee for Extension of Time for one month to reply to the latest Office Action.

FROM : LAWRENCE N. GINSBERG


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Nov. 25 2003 06:17PM P16

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If the Examiner has any further questions, or believes that a telephone interview would be helpful to the advancement of the prosecution of the subject application, a telephone call to the undersigned would be appreciated.

Respectfully submitted,



LAWRENCE N. GINSBERG,
Attorney for Applicant, Reg. No. 30,943

6/5/03

DATE

Certificate of Mailing Under 37 CFR 1.8

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner for Patents, PO Box 1450, Alexandria, VA, 22313-1450, on 6/5/03



Lawrence N. Ginsberg, Reg. No. 30,943

6/5/03

Date